

COPY

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INVENTION TITLE

Retail customer interactive data transfer device and process – with optional expanded capabilities – to collect donations for non-profit organizations at a retail store point of purchase check out counter.

June 21, 2000

To: The Commissioner of Patents

~~It has come to my attention that another party has submitted my prior art for a provisional patent around the end of may 2000. I did not authorize this and this is my submission for a provisional patent. I am the original inventor and I need the records to show that. If a provisional has been submitted can you please provide me with the name and address of the party.~~

Sincerely,



Steve M. Senn

As Returned

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PTO/SB/16 (2-98)

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# PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53 (c).

INVENTOR(S)					
Given Name (first and middle (if any))		Family Name or Surname		Residence (City and either State or Foreign Country)	
Steven Michael Senn				5208-122 Pl. S.E. Everett, WA 98208 U.S.A.	
<input type="checkbox"/> Additional inventors are being named on the _____ separately numbered sheets attached hereto					
TITLE OF THE INVENTION (280 characters max)					
Retail customer interactive data transfer device and process - with optional expanded capabilities - to collect donations for non-profit organizations at a retail store point of purchase check out counter.					
CORRESPONDENCE ADDRESS					
Direct all correspondence to:					
<input type="checkbox"/> Customer Number <input type="text"/> → <div>Place Customer Number Bar Code Label here</div>					
OR					
<input checked="" type="checkbox"/> Firm or Individual Name <u>Steven M. Senn</u>					
Address <u>5208-122 Pl. S.E.</u>					
Address					
City <u>Everett</u>		State <u>WA</u>		ZIP <u>98208</u>	
Country <u>Snohomish</u>		Telephone <u>(425) 742-3012</u>		Fax <u>(425) 379-6306</u>	
ENCLOSED APPLICATION PARTS (check all that apply)					
<input type="checkbox"/> Specification Number of Pages <input type="text"/>		<input type="checkbox"/> Small Entity Statement			
<input type="checkbox"/> Drawing(s) Number of Sheets <input type="text"/>		<input type="checkbox"/> Other (specify) <input type="text"/>			
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The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.					
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Respectfully submitted,

SIGNATURE

Steven M. Senn  
Steven M. Senn

Date

6/22/00

REGISTRATION NO.

(if appropriate)

Docket Number:

TYPED or PRINTED NAME

TELEPHONE

(425) 742-3012

## USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

This collection of information is required by 37 CFR 1.51. The information is used by the public to file (and by the PTO to process) a provisional application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the complete provisional application to the PTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C., 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Box Provisional Application, Assistant Commissioner for Patents, Washington, D.C., 20231.

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**STATEMENT CLAIMING SMALL ENTITY STATUS  
(37 CFR 1.9(f) & 1.27(b))--INDEPENDENT INVENTOR**

Docket Number (Optional)

Applicant, Patentee, or Identifier: Steven M. SennApplication or Patent No.: 6/22/00Filed or Issued: 6/22/00

Title: { Retail customer interactive data transfer device and process – with optional expanded capabilities – to collect donations for non-profit organizations at a retail store point of purchase check out counter.

As a below named inventor, I hereby state that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees to the Patent and Trademark Office described in:

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- ☐ the application identified above.
- ☐ the patent identified above.

I have not assigned, granted, conveyed, or licensed, and am under no obligation under contract or law to assign, grant, convey, or license, any rights in the invention to any person who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern, or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

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Separate statements are required from each named person, concern, or organization having rights to the invention stating their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

Steven M. Senn  
NAME OF INVENTOR

NAME OF INVENTOR

NAME OF INVENTOR

Steven M. Senn  
Signature of inventor

Signature of inventor

Signature of inventor

6/22/00  
Date

Date

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Patent fees are subject to annual revision.  
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See 37 C.F.R. §§ 1.27 and 1.28.

TOTAL AMOUNT OF PAYMENT (\$) 75.00**Complete if Known**

Application Number \_\_\_\_\_  
Filing Date \_\_\_\_\_  
First Named Inventor STEVEN. M. SENN  
Examiner Name \_\_\_\_\_  
Group / Art Unit \_\_\_\_\_  
Attorney Docket No. \_\_\_\_\_

**METHOD OF PAYMENT (check one)**

1. ☐ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

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☒ Check ☐ Money Order ☐ Other

**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
101 690	201 345	Utility filing fee	
106 310	206 155	Design filing fee	
107 480	207 240	Plant filing fee	
108 690	208 345	Reissue filing fee	
114 150	214 75	Provisional filing fee	<u>75.00</u>

SUBTOTAL (1) (\$) 75.00**2. EXTRA CLAIM FEES**

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	-20** =	X	=
Multiple Dependent	-3** =	X	=

\*\*or number previously paid, if greater; For Reissues, see below

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
103 18	203 9	Claims in excess of 20
102 78	202 39	Independent claims in excess of 3
104 260	204 130	Multiple dependent claim, if not paid
109 78	209 39	** Reissue independent claims over original patent
110 18	210 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 0**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
105 130	205 65	Surcharge - late filing fee or oath	
127 50	227 25	Surcharge - late provisional filing fee or cover sheet	
139 130	139 130	Non-English specification	
147 2,520	147 2,520	For filing a request for reexamination	
112 920*	112 920*	Requesting publication of SIR prior to Examiner action	
113 1,840*	113 1,840*	Requesting publication of SIR after Examiner action	
115 110	215 55	Extension for reply within first month	
116 380	216 190	Extension for reply within second month	
117 870	217 435	Extension for reply within third month	
118 1,360	218 680	Extension for reply within fourth month	
128 1,850	228 925	Extension for reply within fifth month	
119 300	219 150	Notice of Appeal	
120 300	220 150	Filing a brief in support of an appeal	
121 260	221 130	Request for oral hearing	
138 1,510	138 1,510	Petition to institute a public use proceeding	
140 110	240 55	Petition to revive - unavoidable	
141 1,210	241 605	Petition to revive - unintentional	
142 1,210	242 605	Utility issue fee (or reissue)	
143 430	243 215	Design issue fee	
144 580	244 290	Plant issue fee	
122 130	122 130	Petitions to the Commissioner	
123 50	123 50	Petitions related to provisional applications	
126 240	126 240	Submission of Information Disclosure Stmt	
581 40	581 40	Recording each patent assignment per property (times number of properties)	
146 690	246 345	Filing a submission after final rejection (37 CFR § 1.129(a))	
149 690	249 345	For each additional invention to be examined (37 CFR § 1.129(b))	

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SUBTOTAL (3) (\$) 0**SUBMITTED BY**Name (Print/Type) STEVEN M. SENNRegistration No. \_\_\_\_\_  
(Attorney/Agent)**Complete (if applicable)**Telephone (425) 742-3012

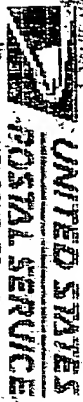
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1. Priority Mail  
Destination: 20237  
Weight: 6.30oz  
Postage Type: PVI  
Total Cost: 3.55  
Base Rate: 3.20  
SERVICES  
Deliv. Confirmation 0.35  
Label#: 03006000000437340534  
2. First Class 0.77  
Destination: 98072  
Weight: 2.20oz  
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625 U. PTC  
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*Provisional Patent  
USPTO Receipt #. 60/214545  
Date. 6/22/2000  
[Signature]*

**INVENTION TITLE**

Retail customer interactive data transfer device and process – with optional expanded capabilities – to collect donations for non-profit organizations at a retail store point of purchase check out counter.

**REFERENCES CITED – TO FOLLOW****BACKGROUND**

The majority of the general public shops at supermarkets and retail discount stores on a regular basis for food and necessities. Non-profit organization charities are raising funds and looking for new avenues to secure contributions. The general public donates to non-profit charities and would feel safe in donating to a secure, easy, fast and understandable system that directs the funds to the charity in the most expedient manor. For more than a decade a device has been used which consists in a form of a rectangular stick to divide groceries and products by the customer at the point of purchase (POP) check out counter. These dividers presently come in different shapes and sizes and are not a proprietary patented item. The following invention involves one device that will take advantage of a patented grocery divider that is interactive with the customer, retailer and non-profit organizations to perform the above functions.

The field of this invention relates to the process and use of an interactive customer donation device to allow non-profit charity donors to interactively and electronically

donate at a retail POP check out counter. Currently retail customers do not make donations to a charities by using an interactive electronic device at a POP checkout that allows them to pick an amount and charity they wish to donate to. It is presently limited to coupons, bar code cards, coin boxes and other fixed and rigid means. For the first time this process, and different forms of devices that are used, will allow contribution decisions to be made electronically by the customer using an interactive programmable electronic device. This process will also allow customers to expedite their donations to the chosen charities by the retailer's electronic funds transfer systems and bank monitored trust accounts.

Expanded optional features on the device will make it a portable, customer interactive, total point of sale and purchase device. This will make the process by the customer faster and interactive. These options will also alleviate lines and overhead for retailers. The customer can use the primary function to donate to a charity, bar code scan their own products, receive advertising information, weigh and enter products using an interactive scale, receive electronic manufacturer coupon offers, swipe store-debit and credit cards, weigh the total products at the POP using an interactive weighing mat scale, download all the purchase information, display the purchased products-prices and data, interact with the system-store database and outside communications systems and perform check out functions with a wireless grocery divider donation device. Prior art in these areas do not cover one or all of these combined process, functions and methods in one system. This will be a customer electronic interactive improvement.

#### BRIEF SUMMARY OF THE INVENTION

The process will allow interactive POP donations to be performed by an affixed touch screen display **Fig.5-Fig.16-21**, in which the display will not be claimed in this patent but the process of interactive donation will, making it an improvement in using the touch display in customer interactive donations. Also calculator sized freestanding device **90-110-350** or a device that also acts as a grocery divider at supermarkets **30-50-70-330** will perform the donation process. The primary processing devices **30-90-Fig.9** will consist of an interactive Liquid Crystal Display (LCD) that will display entered

customer donation data as a unique bar code on the LCD that will be scanned by the retail bar code scanner 14-17-18. The device will contain a solar power cell and a battery for dual power and an expanded option of remote charging contacts and charging base units. At this time a POP retail customer interactive donation device incorporating this process does not exist with or without expanded options capabilities.

There will be the option of expanded capabilities on the retail donation devices that will promote other process that are not available to the retail customer on any interactive retail donation device. Add on options may already exist as a single or combination device but not as an improvement add on to a electronic interactive retail customer POP donation device. The options will be a touch screen interactive display that will be menu driven for donations 50-70-110-330 Fig.10, advertising, store specials, coupon discounts, store-credit and debit card processing, customer self scanning system Fig. 17, customer produce weighing scanning system Fig.18 and customer self check out system Fig. 1-19. This may be interlined with an operations computer 25, wireless receiving and transmission system12, store computer system 10 and communications network such as telephone, satellite or Internet 11. The devices will contain a processor 240 that will be programmed with any given operating systems to enable the devices to perform and interact with the retail customer, bar code scanners, wireless and other operations and data systems. This process, devices and systems do not presently exist in the retail environment and POP check out counter.

## DISCRIPTION OF DRAWINGS

Note: Expanded capabilities are optional for one or all on the basic donation process devices.

Fig. 1 Shows point of purchase donation process interactive devices. Also bar code scanners, operation computer system, register and store computer system.

Fig. 2 Shows a view of a donation grocery divider style device incorporating an interactive touch entry display, solar power cell, LED notification light and liquid crystal display.



Fig. 3 shows a view of a donation grocery divider style device incorporating a touch keypad donation entry, solar power cell, LED notification light and a liquid crystal display

Fig. 4 Shows a view of a donation grocery divider style device incorporating an interactive touch entry display, solar cell and LED notification light in a wireless interactive device with expanded capabilities.

Fig. 5 Shows a POP counter-attached interactive donation touch entry display.

Fig. 6 Shows a calculator style donation device with a keypad input.

Fig. 7 Shows a calculator style donation device with a touch entry display.

Fig. 8 Shows the view of the keypad style entry part and printed overlay.

Fig. 9 Shows the liquid crystal display, arrangement and menu sequence. This display offered on some styles will generate a unique bar code to data input and is to be scanned by the retail bar code scanners.

Fig. 10 Shows a menu driven interactive touch entry display and the arrangement.

Fig. 10A Shows the donation mode, arrangement and progression of the menu driven interactive touch entry display.

Fig. 11 Shows the top view of the grocery divider style device with keypad data entry.

Fig. 12 Shows the section side view of Fig.11 with sectional view of keypad, solar cell and LCD.

Fig. 13 Shows the section side view of Fig.11 with sectional view of electronic components.

Fig. 14 Shows an exploded electronics side view of the keypad style donation device.

Fig. 15 Shows an exploded electronics side view of the menu driven interactive touch entry display donation device with expanded capabilities.

Fig. 16 Shows the attached menu driven interactive touch entry donation process display.

Fig. 17 Shows the grocery divider style donation device with expanded capability bar code scanning a bar code with a built in bar code scanner.

Fig. 18 Shows an electronic produce scale with numbered wireless transmitter to interact with the grocery divider style donation device with expanded capabilities for produce and weight measured purchases.

Fig. 19 Shows a POP check out mat scale and wireless transmitter to interact with the grocery divider style donation device with expanded capacities. Also to interact with operations computer and the store computer and communications systems.

Fig. 20 Shows a grocery divider style donation device with all expanded capabilities including card swipe processor, menu driven interactive touch entry display, built in bar code scanner, LED notification light, solar power cell, remote charging contacts and wireless communication capability.

Fig. 21 Same as Fig 20 only shows the method of swiping a store, debit or credit card.

Fig. 22 Shows the calculator style donation device with expanded capabilities including card swipe processor, menu driven interactive touch entry display, built in bar code scanner, LED notification light, solar power cell, remote charging contacts and wireless communication capability.

Fig. 23 Shows the base-charging unit for the calculator style donation device with remote charging contacts capability.

Fig. 24 Shows the grocery divider style donation device with all expanded capabilities including remote charging contacts.

Fig. 25 Shows base charging unit for grocery divider style donation device. Also shows top view and sectional view.

Fig. 26 Shows POP check out counter base charging rail unit for the grocery style donation device with remote charging contacts and the divider in place.

## DETAILED DESCRIPTION OF THE INVENTION

**Fig. 1.** Illustrates some of the donation process point of purchase interactive devices. **16** shows the retail check out counter and the hand held bar code scanner **14** and built in counter bar code scanners **17 18** that are used in scanning the donation devices **30 50 90**. The conveyor belt **19** moves the products to the checker and the donation point grocery divider **30-50-70-330** separates the purchases. The donation devices **50-30-90** will contain a liquid crystal display (LCD) **31-51-91-111** which will contain a unique generated UPC bar code **Fig.9, 171** that is generated on the LCD when the retail customer enters numeric monitory data **152** and non-profit organization destination data **151** via touch keys **156** or interactive menu driven interactive touch display **Fig.10 – Fig.10a, 53- 113-332-352**, that the retail clerk will bar code scan using the retail bar code scanning equipment **14-17-18**. The bar code scanned data is transferred to the retail data base computer system **10**, if it is wireless data it is sent and transmitted by a wireless unit **12** and processed by an operations computer **25** where the data is processed by the retail data computer over the cable **26**. The data processed by the store computer **10** will be forwarded to the main retailers accounting office by connecting cable **27** via telephone, satellite or other types of communications systems **11**. The donation can be checked by the read out on the check out register **15**. An affixed type of donation process and system can be attached to the POP check out counter **Fig. 5–21-Fig.16**. The donation process may remain the same but the device may vary in configuration and design such as a calculator size style donation device **90-110-350** and base charging unit **24**. Some grocery divider style donation devices **70-330** will have remote charging contacts **335** that will help supplement the battery **235** and solar power cell **31-51-92-112-260-331-351**-that will be set in the base charging units **28** a counter rail charger or a base charger **Fig.25** or the calculator style charger **24-Fig.23**. Any LCD displays solar power cells or interactive menu touch displays can be any size or shape to fit the style of donation device.

**Fig.2** shows a grocery style donation device **50** with an interactive menu driven touch display **53-Fig.10-Fig.10a** a solar power cell **52** which is slightly larger than the units with the touch keys **Fig.3**. The device also shows an LED check out clerk notification device **32** and a LCD read out **51-Fig.9**.

**Fig.3** shows the base line device with the simplest patent claim process. This is the donation grocery divider device in its simplest form. All the other expanded capability options are deemed improvements on this existing basic device and process. The device **30** has a customer touch key pad **35-Fig.8** a solar power cell **32** a check out clerk LED notification light **32** and a menu driven style LCD **31** to give instructions, entry data and produce a bar code to be scanned at the POP **Fig.1**.

**Fig.4** shows the grocery divider style device **70** that contains a interactive menu driven touch display **72-Fig.10-Fig.10a**, a check out clerk LED notification light **32** and solar power cell **71**.

**Fig.5** is an attached interactive menu driven display **130** that has a donation at the retail point of purchase touch display **131**. The display is attached to the POP counter shown here. **16** counter **17** bar code scanner. The menu display is a interactive donation customer touch choice display that will contain scrolling advertising, touch choice for donations, touch scrolling for donation search choices.

**Fig.6** is a calculator style interactive retail donation device **90** with the keypad entry design **93**. This is the most basic donation device of this style and shows the touch entry key pad **93** with pre determined denomination amounts **95** an on, clear key **96** and 14 other keys for text data entry for non-profit organizations **94**. The device also contains a solar power cell **92**, a retail checker donation notification LED light **32**. The bar code generating LCD bar code and information display **91-Fig.9** is at the top.

**Fig.7** is a calculator style donation device with an expanded capability option of a retail customer menu driven interactive touch display **113-Fig.10-Fig.10a** where as the display menu will be set up similar to the grocery divider style device **50**. These displays can vary in size and shape and the menu can vary in layout. At the top is a LCD **111** for generating a bar code to be scanned by the retail bar code scanner systems **Fig.1-14-17-18**.

**Fig.8** shows a layout of the touch key display **34-93** with **93** being the calculator style donation device. The key layout can be of different configuration to conform to other style shapes. The keypad entry devices may have an instruction key **153** to offer help to the donation customer. The on – clear key **154** will reset the device or activate because an automatic partial shut down occurs (**Fig.15- power controller 236**) after a period of time to preserve battery life. **151** represents a donation key, **156** denotes a number on a key to use in cross referencing the assigned bar code identifier associated with that number and the numerical amount or organization that is associated with the store and number. **152** denotes a donation amount that can vary per device style or marketing needs. **155** is an optional key to allow a donation customer the ability to divide their donation evenly among all the listed organizations on the device. **150** shows the printed plastic overlay with ether punch out holes or flush raised portions. **159** shows the keypad mechanism with raised switch portions **158**.

**Fig.9** shows a liquid crystal display **170** (LCD) on which part of it the bar code is displayed and UPC number **171-section D** to be read by the retail bar code scanner. **172-section A** will be a menu prompt. **173-section B** shows corresponding numbers as to the touch keys showing non-profit organizations. **174** can be used for advertising as an expanded capability option.

**Fig.10** shows a lay out for a customer interactive menu driven touch select display **192**. The configurations a layout of the displays may vary but a donation system for the

customer to interactively donate to a non-profit organization will always be on the display. The display may vary in size and shape due to the style of the donation device. **198** touch point will tell the customer about the retail store. **197** are for when the customer is finished and wants to check through to POP system. A menu screen for sale items or coupons can be displayed by touching the touch point **196**. An instruction screen can be displayed by touching the instructions square **194**. Scrolling advertising **190** will be on the main screen and not displayed on menu sub-screens. In the Donation Point **191** will access display **Fig.10a** and the 15 or 20 largest charities. **195** will access a menu display **Fig.10a** and a scroll display to select charities **204-205**. The payment display is shown in **section A, 206-207-208-209**. Upon finishing the donation process the customer can clear the device **193** or turn the unit on after the power conserve mode has shut down most functions.

**Fig.11** is a top view of the grocery divider style interactive donation device. The device shows the plastic or composite outer shell **30**, the printed key overlay **34**, the touch keys **35**, the solar power cell **33**, the clerk donation notification LED light **32** and the LCD bar code display **31**.

**Fig.12** is a front **sectional AA** view of **Fig.11** and shows **230** touch key contact board and **232** the inner electronics parts chassis which can be made in any shape or size to fit the style of donation device. **Fig.13** is a front **sectional AA** view of the electronic chassis **232** and electronics. Material for shock absorption **231** will be incorporated in the device. Other parts will be described in **Fig. 14 – Fig.15**.

**Fig.14** shows an exploded view of the touch keypad device **30**. Shown is the touch key board **230** solar power cell **33**, LED clerk notification donation light **32**, Liquid Crystal Display **31** for displaying a bar code to be read by a retail bar code scanner. The battery **235** and battery holder **234** are part of the power supply. The battery will be a rechargeable cell to accept charging from the solar power cell **33** when power demand is

idle. All the power requirements, distribution, charging and solar power cell are routed through the power management module **236** that controls all these functions and dual power system. Electronics and automatic power partial shut down feature for battery and systems longevity is managed by module **237**. **248** controls the LED check out clerk notification light **32**. **239** is an optional wireless transceiver for wireless operation. **240** is the main processor that controls all interactive data and functions in the process of interactive donations or expanded capabilities. The main processor is connected to all other electronics by the main circuit board **242**.

In **Fig.15** devices with expanded capabilities may contain a bar code scanner **241** that will allow the retail customer the ability to bar code scan their own products with the donation device for a self donation and POP check out system. With the expanded capabilities options a device may contain an interactive touch menu display **261** and a larger solar power cell **260**.

In **Fig.16** the donation process and device may also be an attached menu driven interactive touch menu display **279** where the customer can choose at the time of check out an amount and non-profit organizations to donate to. **291** is a hard wire to the store computer system or transmission unit at the POP counter.

**Fig. 17** shows a donation device **300** with an expanded capability option of a built in product bar code scanner **288** that is used for a retail customer to scan their own product bar code **283** for price or purchase of a product **282**. With the bar code scanning device the donation device will also have wireless data communications capability.

**Fig.18** shows an electronic weight scale **301** that is connected to a wireless transmitter **302** so customers may weigh their own product, enter the scale number and enter the amounts on an expanded capability donation device for weight purchases. A power supply **303** may be needed for the scale and wireless device.

**Fig.19** shows a grocery cart mat scale **311** used as part of an expanded capability donation device total customer retail supermarket POP check out system. The grocery cart **310** is wheeled onto the mat scale. The weight is sent to the device operations computer via a wireless communications device **308** with the systems powered by a power converter **309**.

**Fig.20** shows a grocery divider style donation device **330** with all device expanded capability options. There is a built in product bar code scanner **334**, a store, debit or credit card swipe slot **333**, an interactive menu driven touch display **332**, a check out clerk LED donation notification light **32**, a solar power cell **331** for battery charging and power supply and charging contacts **335** for base charger **Fig.25** battery maintenance and charging.

**Fig.21** shows the same device as **Fig.20** but shows the use and direction a card **334** can be used in the swipe slot **333**.

**Fig.22** shows a calculator style donation device **350** with all the expanded capability options as **Fig.20**. There is the card swipe a lot **353**, customer interactive menu driven touch display **352**, LED checker donation notification light **32**, solar power cell **351** and base charger charging contacts **354**.

**Fig.23** shows a base charging unit fir the calculator style retail POP donation device. The device **350** will slip into a case **24**, **which** will have charging contacts **357** designed to match with the donation device contacts **354**. A power supply **356** will operate the base charging system.



## CLAIMS

I claim:

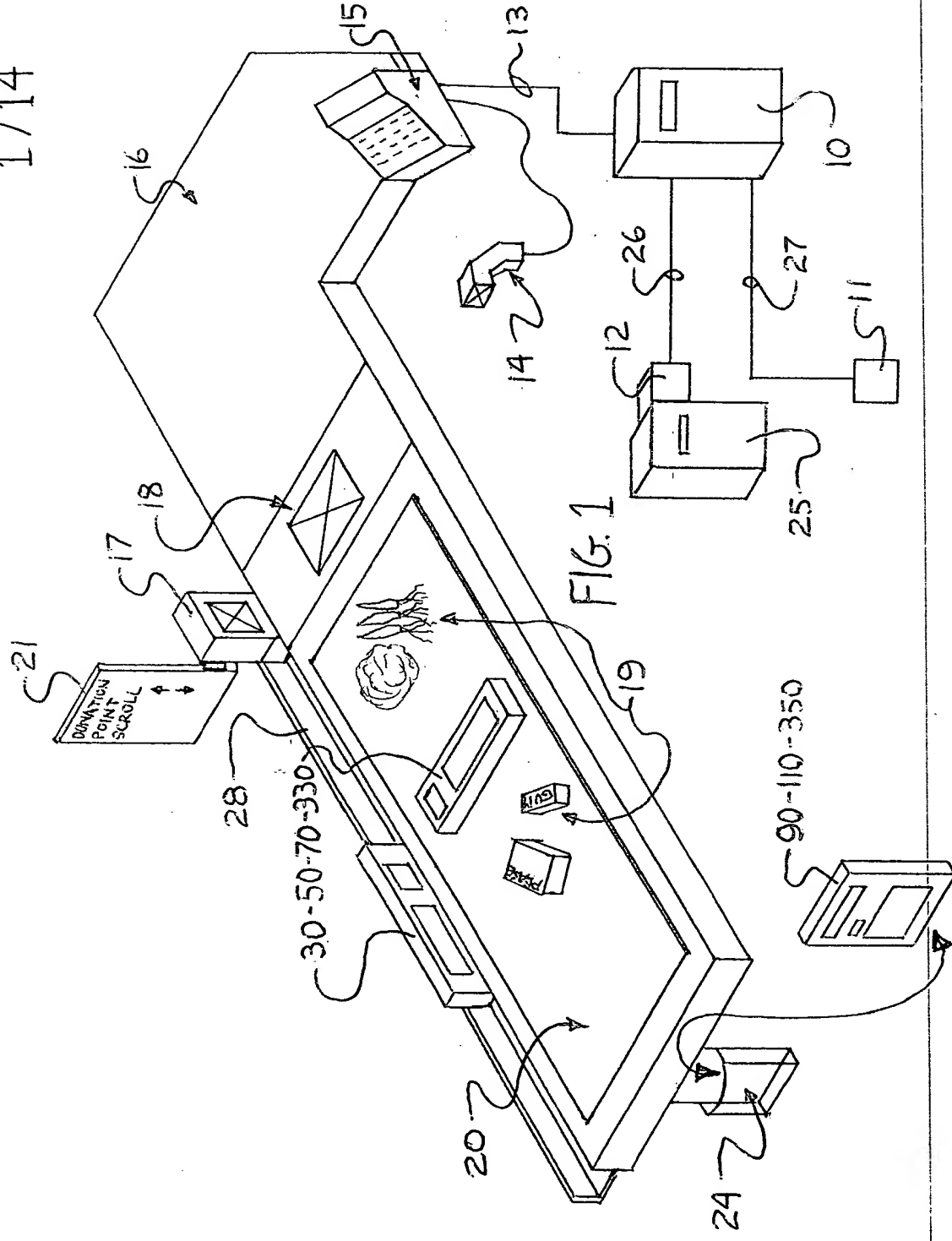
1. A retail store customer interactive electronic data transfer device and process in the form of a freestanding retail grocery product divider or calculator style, but can be any size or shape and configuration, that generates a unique international Uniform Code Council (UCC) registered manufacturers Uniform Product Code (UPC) on a liquid crystal display (LCD) when the customer enters an amount and non-profit organization destination on a touch key pad, that can also be a interactive menu driven touch screen display, where as the LCD bar code will be read by a retail store bar code scanner system at the retail stores point of purchase (POP) counter or register and computed in the retail stores data base system to efficiently transfer the funds paid by the customer at the POP to a trust account, then directly to the non-profit organizations.
2. A retail store customer donation device according to claim 1 where as the method and process can be extended to an POP check out counter affixed menu driven interactive touch entry display directly connected to the retailer POP computer system.
3. A retail store customer donation device according to claim 1 where as the device can have a menu driven interactive touch entry display with scrolling advertisements, scrolling search and multiple display text configurations.
4. A retail store customer donation device according to claim 1 where as the device can transmit and receive the data via a wireless method interacting with the retail store computer system and communications network.
5. A retail store customer donation device according to claim 1 where as the device will incorporate a battery and solar power cell to run, recharge and maintain the power systems.

6. A retail store customer donation device according to claim 1 where as the device will incorporate a LED light to notify the retail check out clerk of collecting the customer donation or purchase data from the device and operations computer for processing with the retail store computer and communications systems.
7. A retail store customer donation device according to claim 1 where as the device will incorporate a product bar code scanning device to allow retail customers to scan their own products creating a combination non-profit donating and retail customer self bar code scanning and check out system.
8. A retail store customer donation device according to claim 1 where as the operating system can be windows CE or any combination of software programming and operations hardware used to achieve the donation and expanded option capabilities goal.
9. A retail store customer donation device according to claim 1 where as the device can interact with an electronic product weight scale and wireless data transmission device, that is part of the system, to allow the customer to enter weight measured products into the total customer purchase.
10. A retail store customer donation device according to claim 1 where as the device will interact with a floor mat weight measuring grocery cart scale and wireless data transmission device, that is part of the system, allowing the retailer to measure the total customer product weight and comparing it to the total weight of the products bar code scanned by the customer, which will compare the difference, create a retail purchase oversight and purchase confirmation system.
11. A retail store customer donation device according to claim 1 where as a built in card swipe in the device will allow the retail customer to swipe store club, debit or credit cards with the donation device when the device incorporates wireless communication capabilities.

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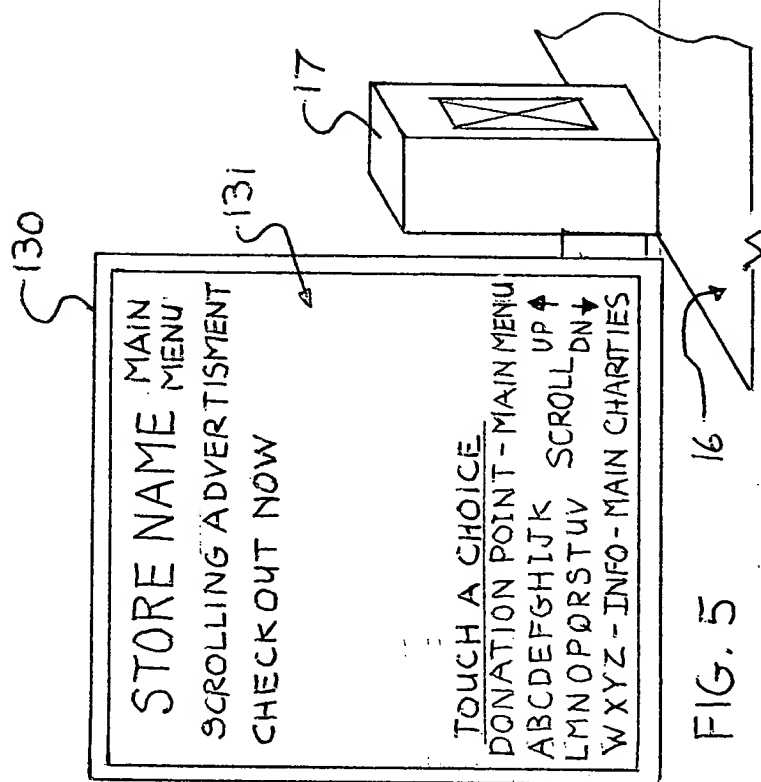
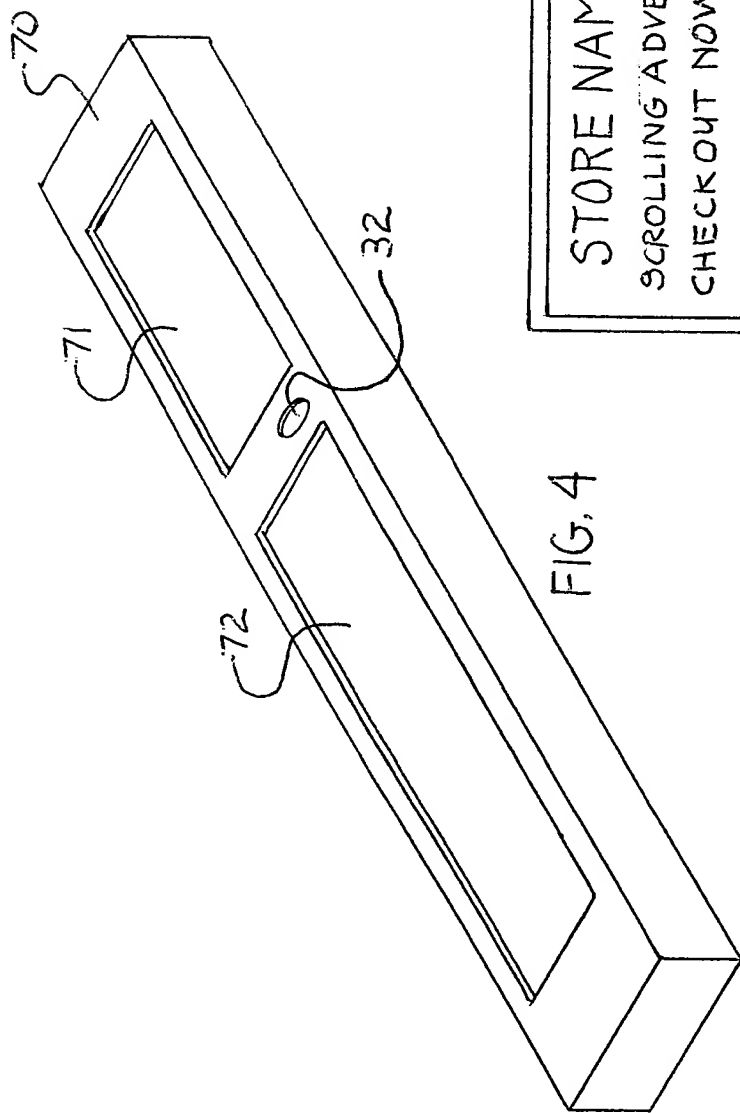
INVENTION TITLE

Retail customer interactive data transfer device and process -- with optional expanded capabilities -- to collect donations for non-profit organizations at a retail store point of purchase check out counter.



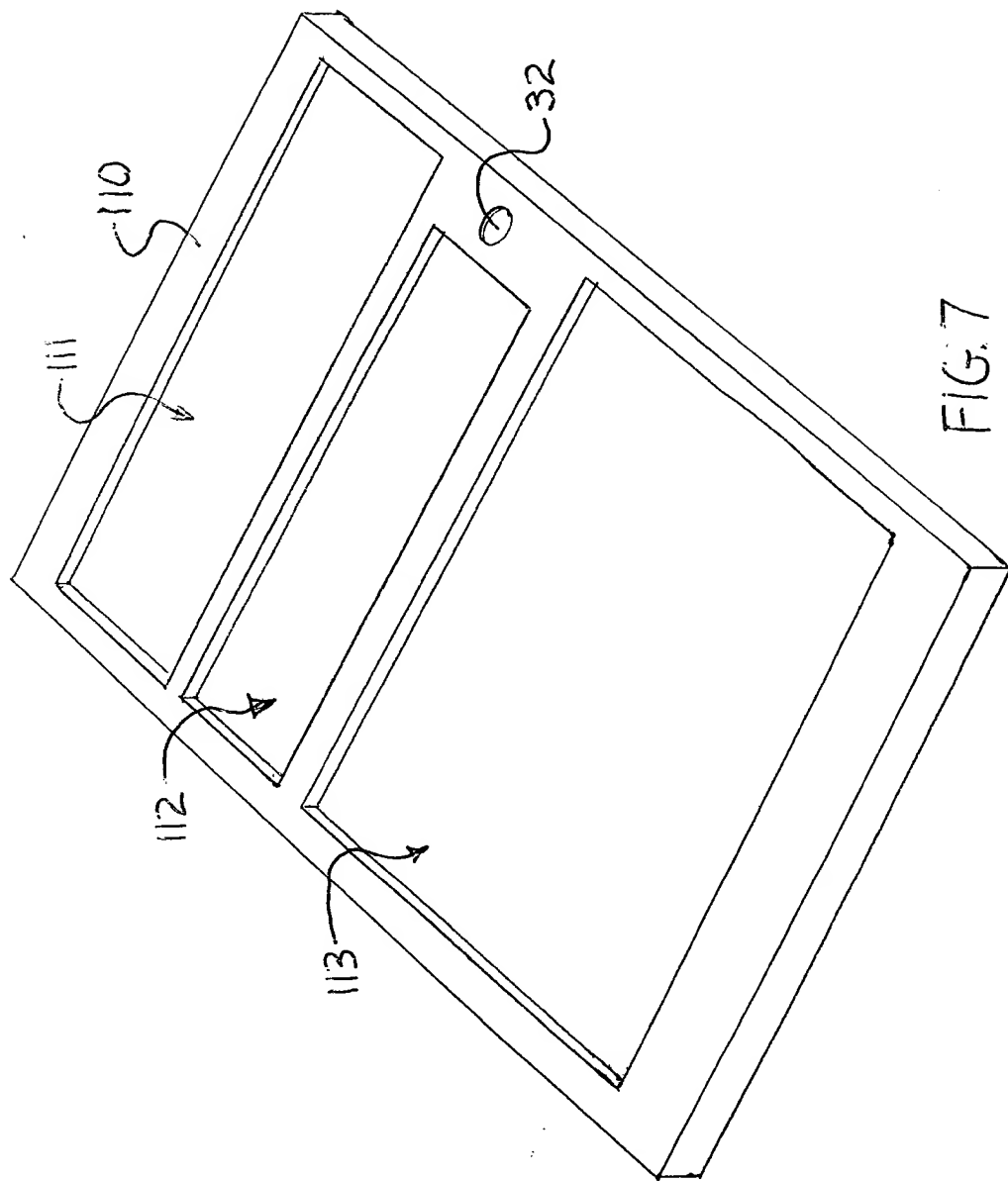
DONATION PROCESS POINT OF PURCHASE INTERACTIVE DEVICES

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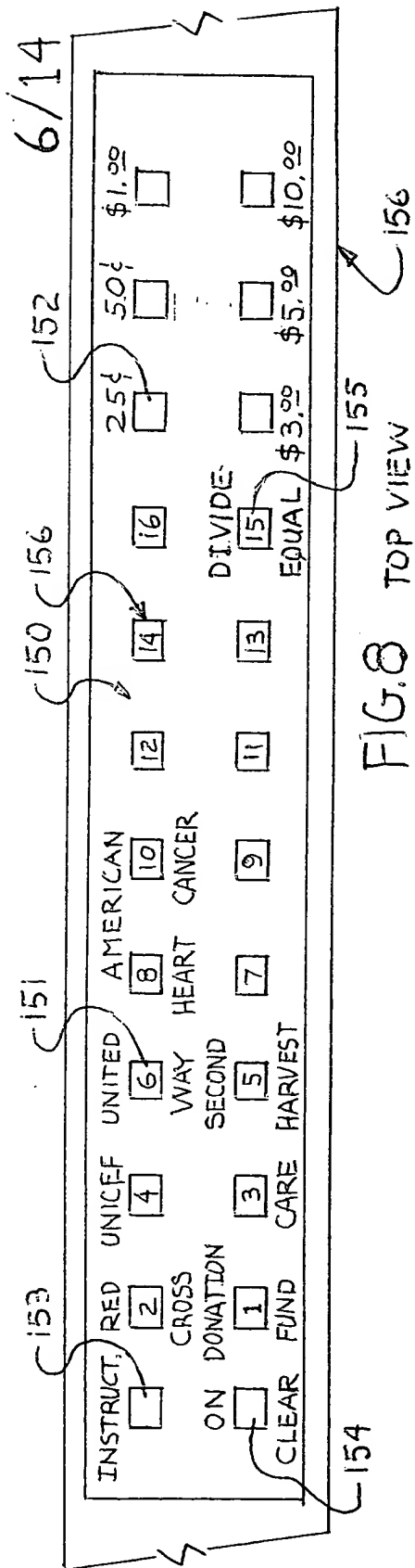
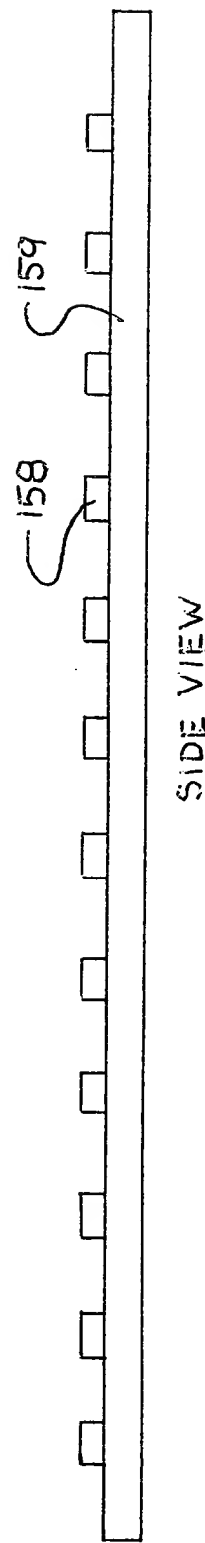
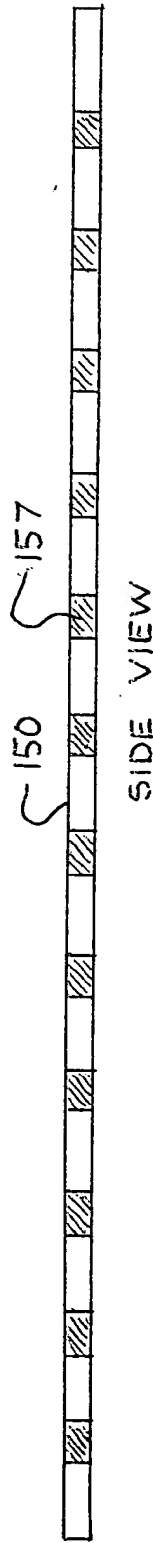
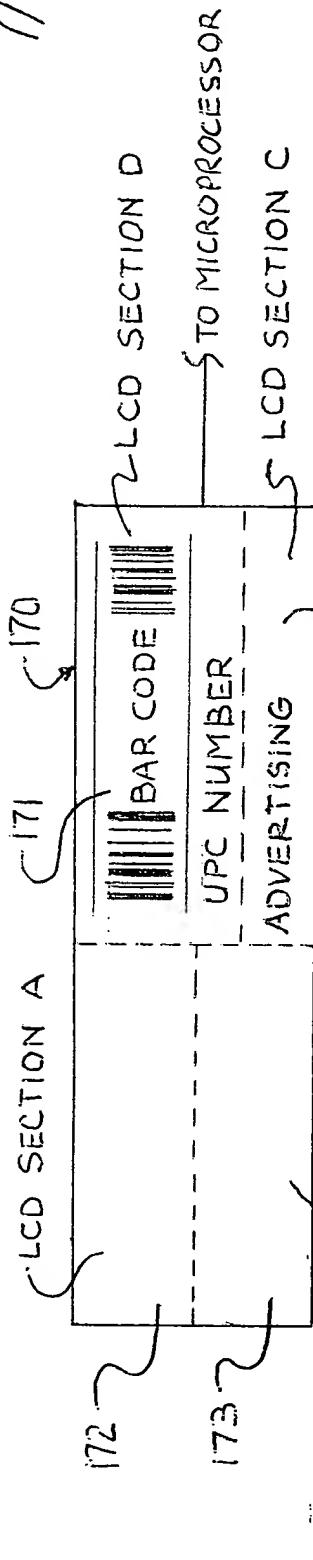


FIG. 8 TOP VIEW





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PRESS ON/CLEAR  
TO START OR RESET

SECTION A

PRESS ONE CHARITY  
COMBINATION OF OR  
DIVIDE TO ALLEQUAL

SECTION A

DONATION \$001.25  
TOTAL  
PRESS ON/CLEAR TO RESET

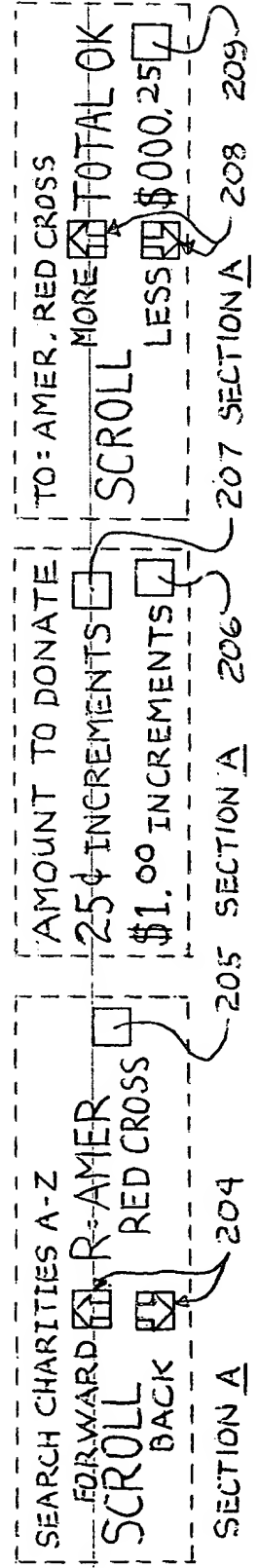
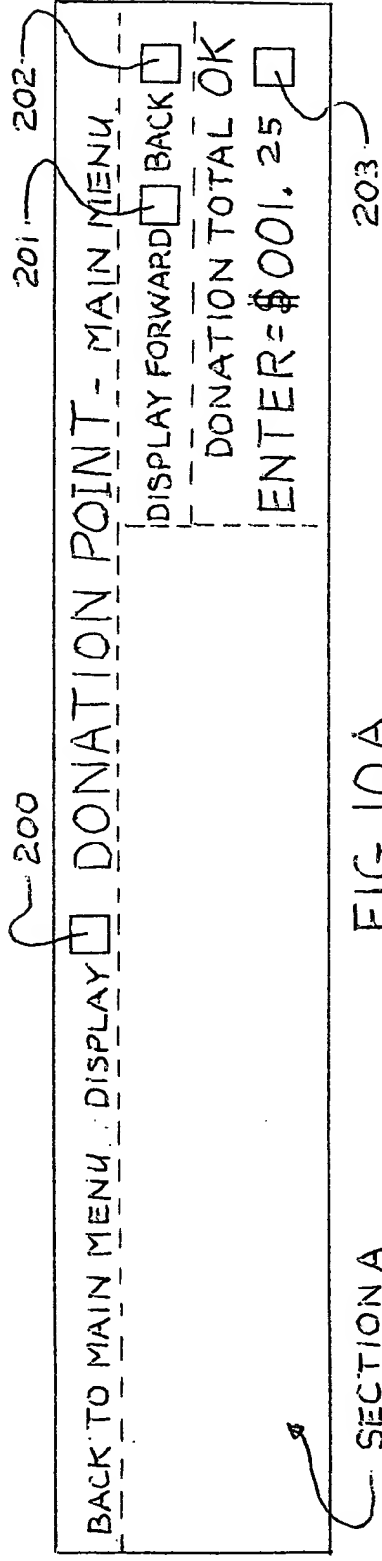
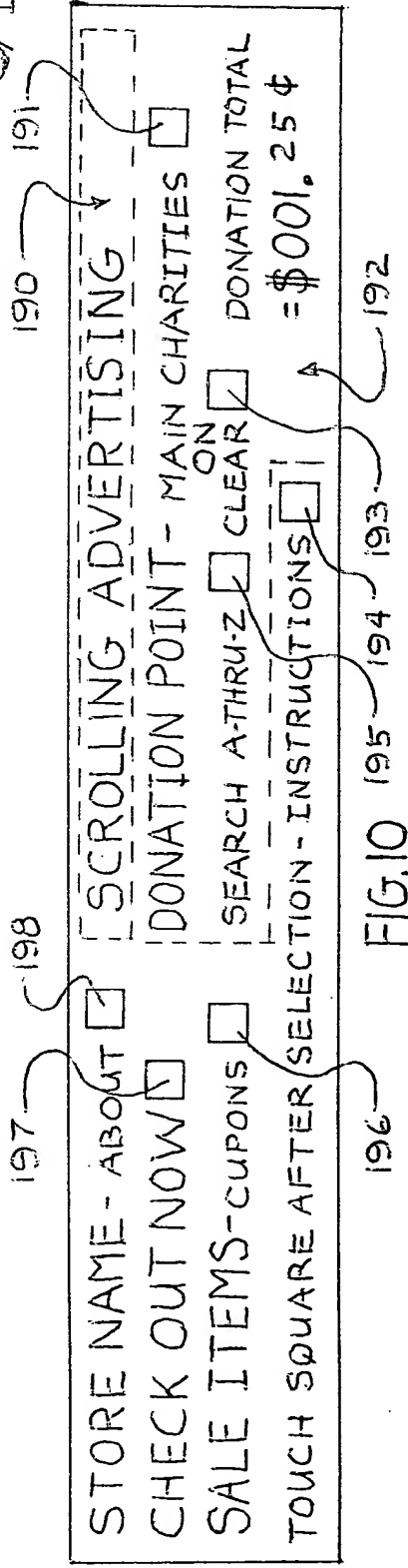
SECTION A

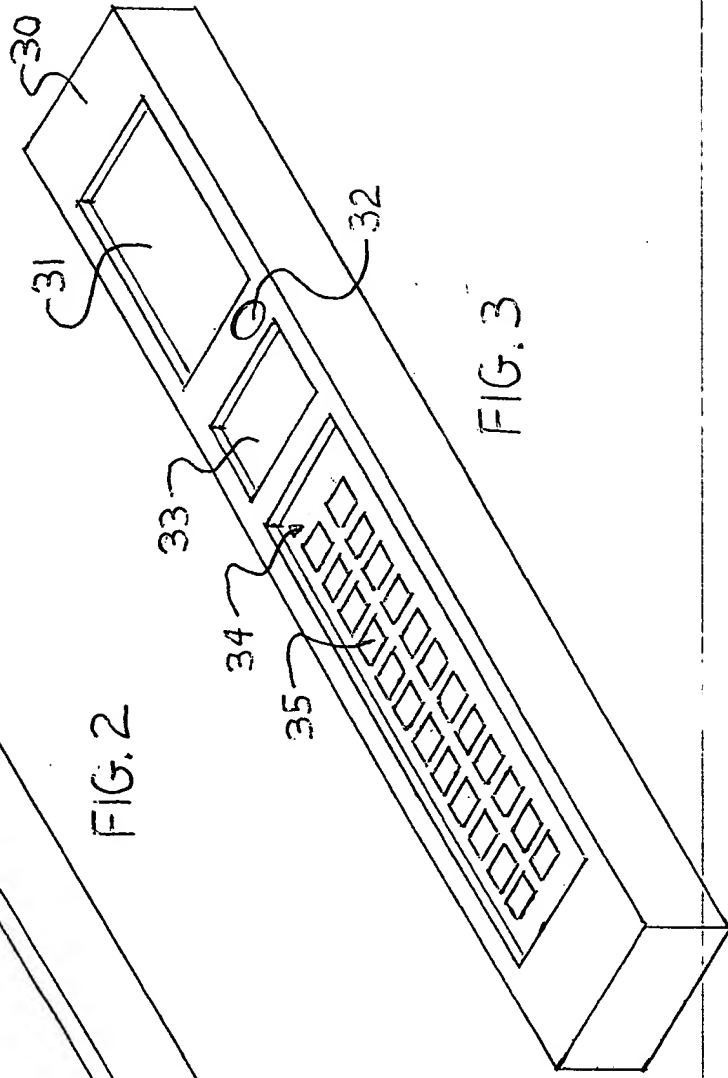
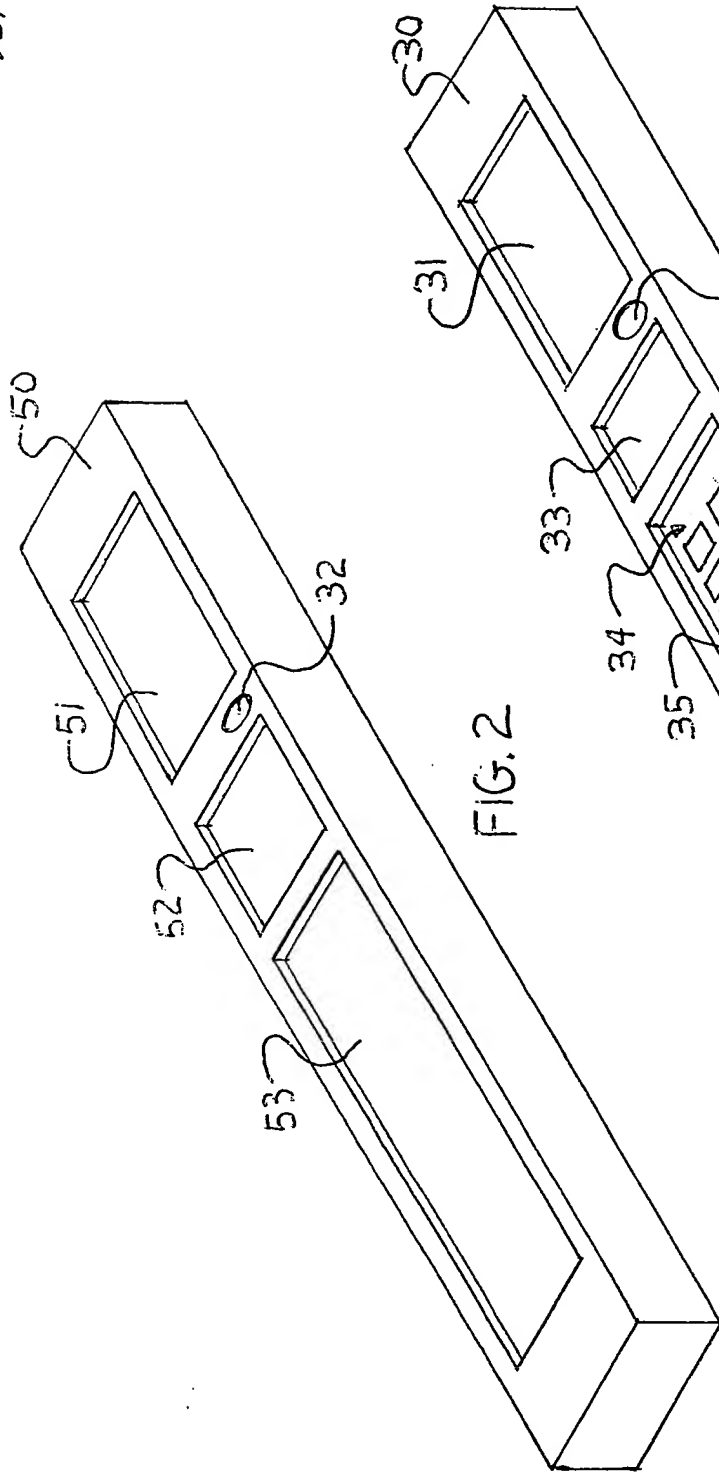
ERROR--PRESS  
ON/CLEAR KEY

SECTION A

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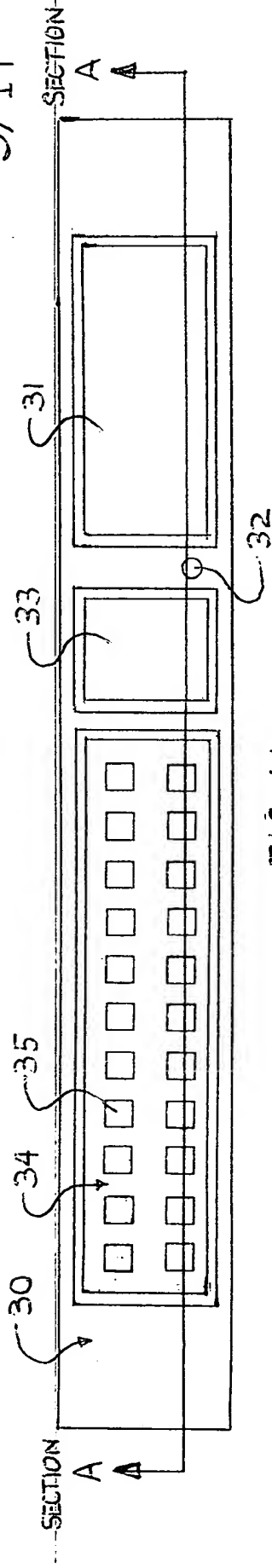


FIG. 11

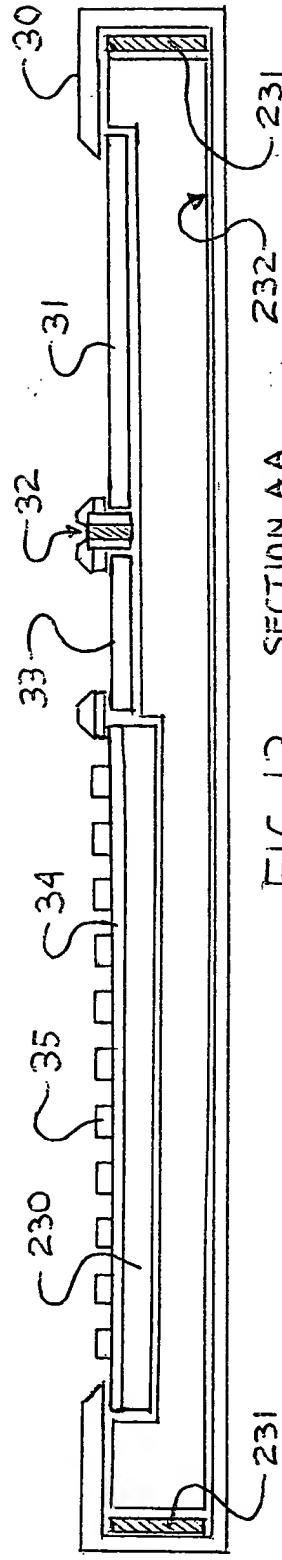


FIG. 12 SECTION AA

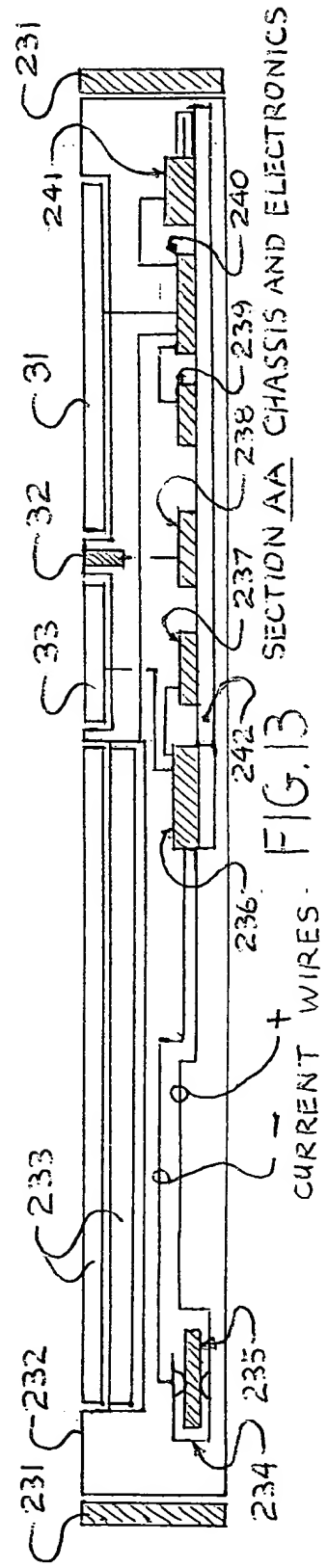
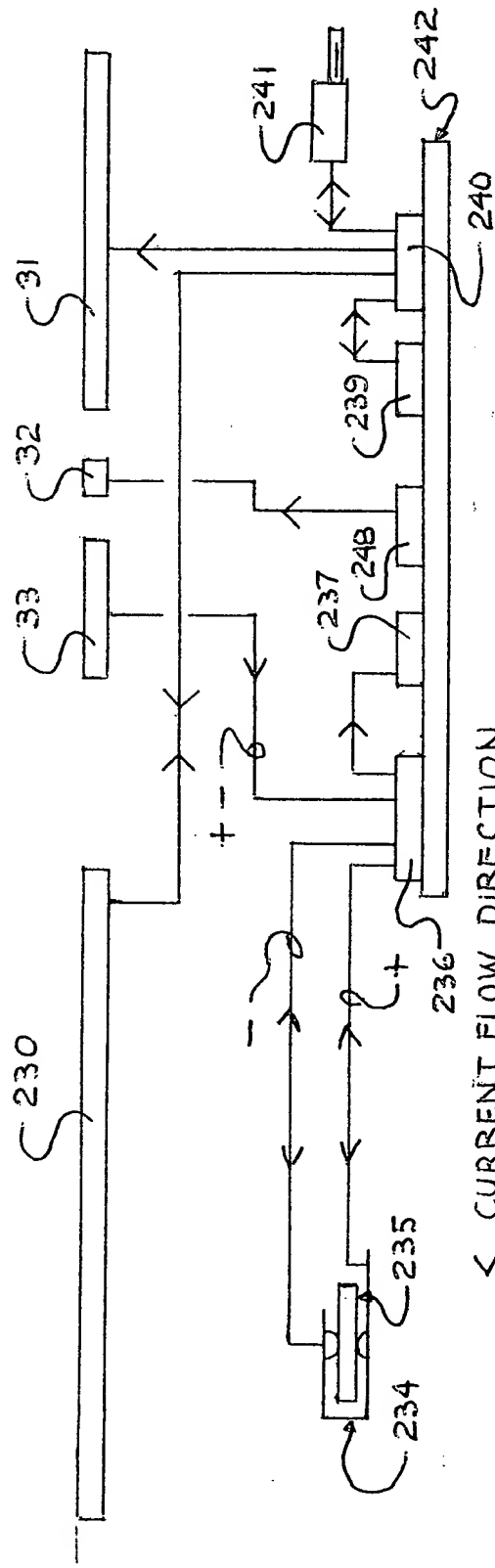


FIG. 13 SECTION AA CHASSIS AND ELECTRONICS

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< CURRENT FLOW DIRECTION

FIG. 14 EXPLODED VIEW ELECTRONICS  
TOUCH KEY PAD MODEL

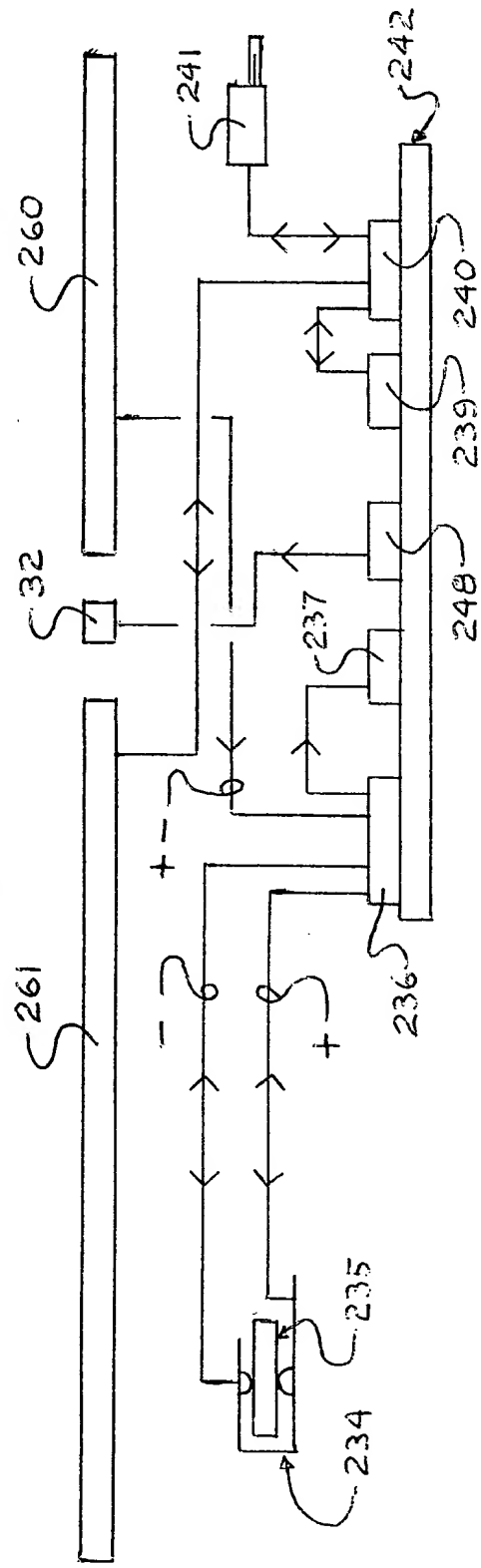


FIG. 15 EXPLODED VIEW ELECTRONICS  
TOUCH INTERACTIVE DISPLAY MODEL

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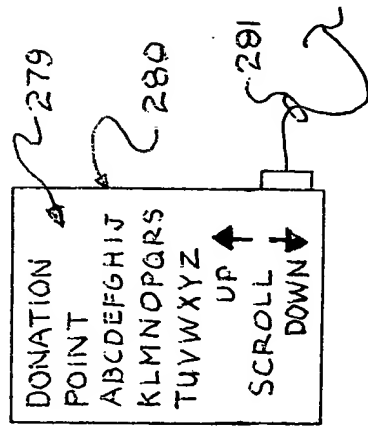


FIG. 16

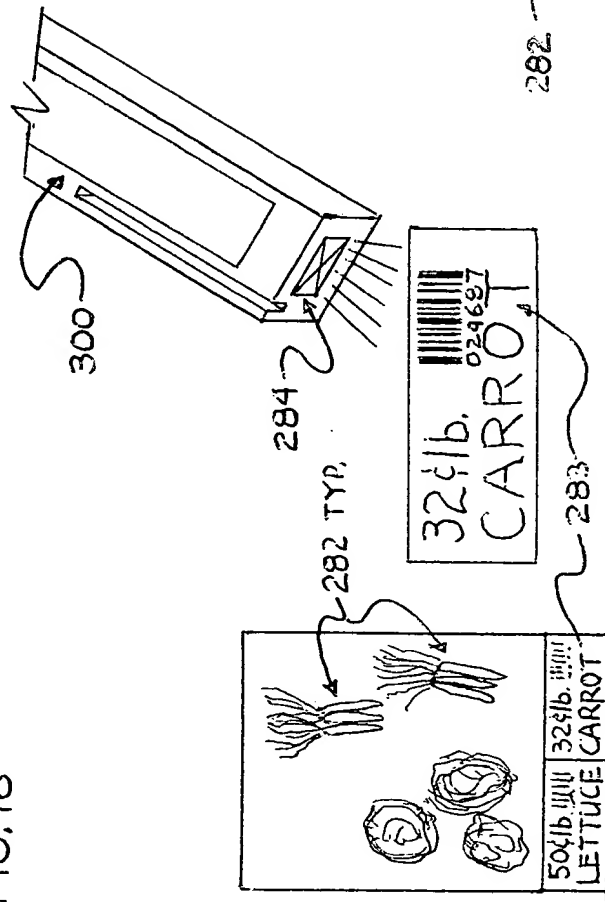


FIG. 17

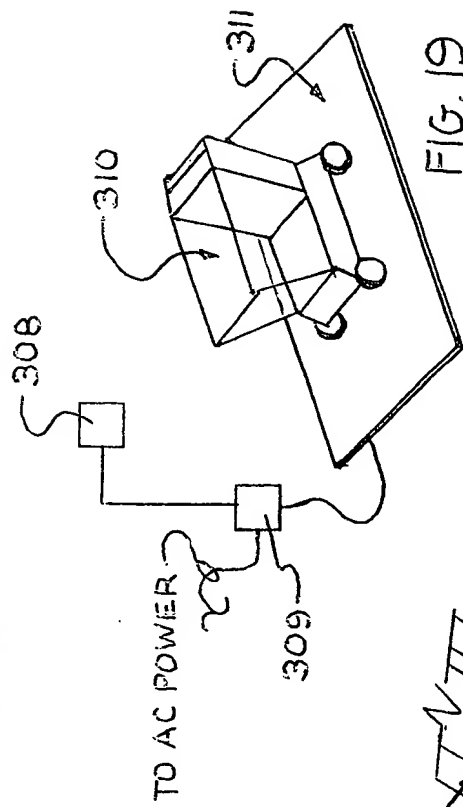


FIG. 19

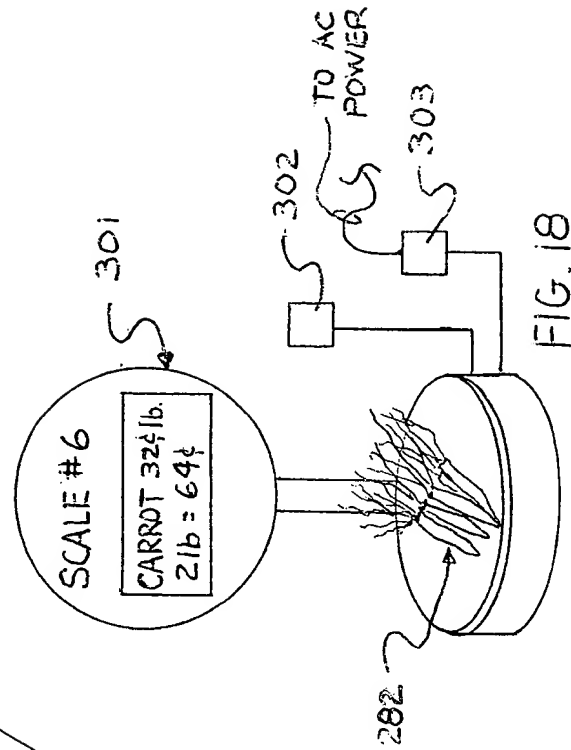


FIG. 18







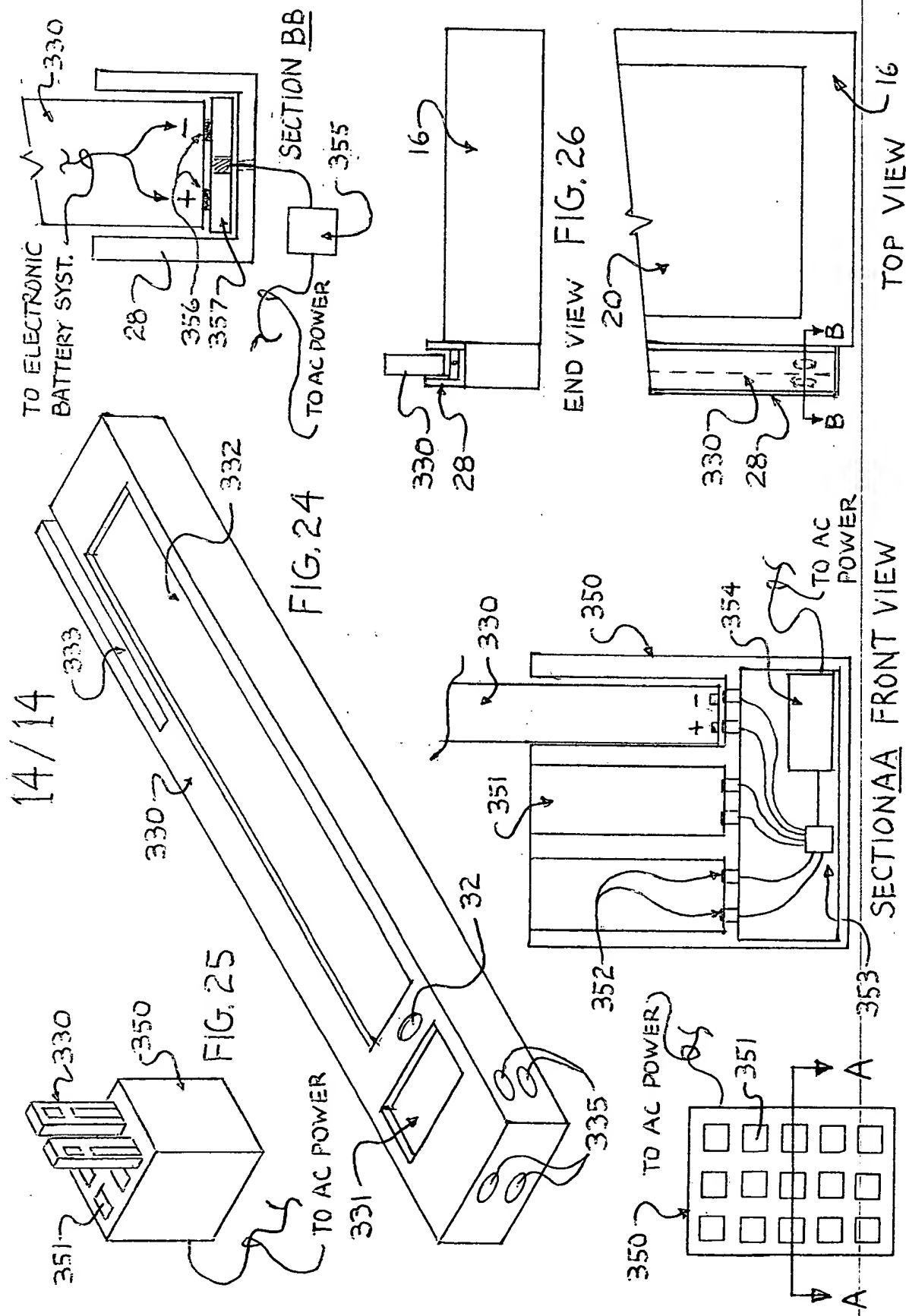


FIG. 25

FIG. 26

**ABSTRACT**

A retail customer interactive electronic data transfer device that uses various interactive programming and menu driven displays, that can be in the form of a supermarket grocery divider, or any style or shape, that allows the retail customer to donate funds to non-profit organizations at a retail point of purchase check out bar code scanner, using the device that allows the customer to enter a numeric value and a non-profit organization destination and other interactive data, including discounts and payment methods, via touch keys or interactive touch menu display, where as the device will create a UCC registered uniform product bar code on a liquid crystal display to be scanned by the store bar code scanner, or with device expanded capability options, including a total supermarket self purchase and check out system, donation and other data is transferred both ways wirelessly and processed by the retail data and communications systems.

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